REMARKS

Independent claims 1, 5, 9, and 13 are amended to further clarify the invention. Generally, the limitations clarify that a boundary scan interface is used during co-simulation of first and second components for communication between the components, the first component co-simulated on the hardware platform, and the second co-simulated on the HLMS in software. Example embodiments of the limitations added to the claims are shown and described in the drawings and specification at FIG. 1, #104, #106; FIGs. 3A and 3B; and paragraphs [0002], [0005], [0015], [0028], [0042], and [0048]. Dependent claims 3, 7, and 11 are amended to correct typographical errors.

Claims 1-13 are pending in the application. Reconsideration and allowance of the application are respectfully requested.

The rejection of claims 1-3 under 35 USC §103(a) over "Tseng" (U.S. Patent Pub. No. 2006/0117274 to Tseng et al.) in view of "Bowen" (U.S. Patent Pub. No. 2003/0105620 to Bowen) is respectfully traversed. The rejection is traversed because all the limitations are not shown to be suggested by the references, and a proper motivation for modifying the teachings of Tseng with teachings of Bowen has not been provided.

The Tseng-Bowen combination does not appear to teach or suggest the limitations of co-simulating first and second components in hardware and software, respectively, and interfacing the first and second components via a boundary scan interface, as set forth in claim 1, for example. Furthermore, the alleged motivation is unsupported by evidence.

Claims 2 and 3 depend from claim 1 and the limitations are not shown to be suggested for at least the reasons set forth above. Therefore, a *prima facie* case of obviousness has not been established, and the rejection of claims 1-3 should be withdrawn.

The rejection of claim 4 under 35 USC §103(a) over the Tseng-Bowen combination in view of "Lin" (U.S. Patent Pub. No. 2004/0236556 to Lin) is respectfully traversed because all the limitations are not shown to be suggested by the references, and a proper motivation for modifying the teachings of Tseng-Bowen with teachings of

Lin is not provided. Tseng's teachings at [0191], [0476], and [0712] are not understood to suggest the claimed translator, nor are Tseng's teachings at [0712] understood to correspond to the claimed shift register. Furthermore, the alleged motivation does not provide any evidence that Tseng's behavior processor system and method that generates hardware elements from normally non-synthesizable code elements for placement on an FPGA device, would have any use for "dynamically allocating multiple resources to multiple hosts." It is unclear how the asserted modification would even provide this capability. Claim 4 also depends from claim 1 and the limitations are not shown to be suggested for at least the reasons set forth above. The rejection of claim 4 should be withdrawn because a *prima facie* case of obviousness has not been established.

The rejection of claims 5-7, 9-11 and 13 under 35 USC §103(a) over the Tseng-Bowen combination in view of "Chelcea" (U.S. Patent No. 6,850,092 to Chelcea et al.). is respectfully traversed because the Office Action does not show that all the limitations are suggested by the references, and does not provide a proper motivation for modifying the teachings of Tseng-Bowen with teachings of Chelcea.

Independent claims 5, 9, and 13 include limitations similar to those discussed above in regards to claim 1. Therefore, all the limitations are not shown to be suggested for at least the reasons set forth above. Similarly, claims 6-7 and 10-11 depend from claims 5 and 9, and the limitations are also not shown to be suggested by the combination.

The alleged motivation for combining Chelcea with Tseng is unsupported by evidence. Specifically, there is no apparent evidence that Tseng needs a FIFO circuit having a low latency and high throughput and capable of operating in mixed environments. This is simply a function provided by Chelcea.

The rejection of claims 5-7, 9-11, and 13 should be withdrawn because a *prima facie* case of obviousness has not been established.

The Office does not establish that Claims 8 and 12 are unpatentable under 35 USC §103(a) over the Tseng-Bowen combination and further in view of Chelcea and Lin. The rejection is respectfully traversed because the Office Action does not show that all the limitations are suggested by the references and does not provide a proper
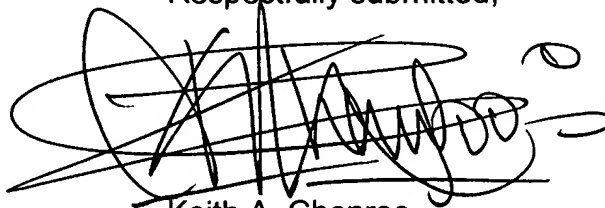
motivation for modifying the teachings of Tseng-Bowen with teachings of Chelcea and Lin.

Claim 8 depends from claim 5, and claim 12 depends from claim 9. Therefore, the limitations are not shown to be suggested for at least the reasons set forth above. Furthermore, the alleged motivation for making the combination is improper for at least the reasons set forth above for making the Tsen-Bowen-Chelcea combination and improper for at least the reasons set forth for making the Tseng-Bowen-Lin combination. The rejection of claims 8 and 12 should be withdrawn because a *prima facie* case of obviousness has not been established.

CONCLUSION

Reconsideration and a notice of allowance are respectfully requested in view of the Amendments and Remarks presented above. If the Examiner has any questions or concerns, a telephone call to the undersigned is invited.

Respectfully submitted,

Keith A. Chanroo
Attorney for Applicants
Reg. No. 36,480
408-879-7710

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on October 12, 2006.

__Pat Tompkins__
Name

Signature